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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,998	07/15/1999	SUSUMU SENSYU	SONY-P9817	4457
22850	7590	06/18/2004	EXAMINER	
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			SHAH, NILESH R	
		ART UNIT	PAPER NUMBER	
		2127	19	
DATE MAILED: 06/18/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	09/353,998	SENSYU, SUSUMU
Examiner	Art Unit	
Nilesh Shah	2127	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 31 March 2004.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 8-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 8-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____. | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____.                                   |

## DETAILED ACTION

1. Claims 8-18 are presented for examination.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 8-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takemura et al (6,078,559) (hereinafter Takemura) and further in view of Sako et al (5,966,359) (hereinafter Sako).
4. As per claim 8 Takemura teaches an optical disc having a data format, comprising: a first logical data structure disposed in a first ECC block; and a second logical data structure including at least an ID information of a physical sector disposed in a second ECC block, wherein the first and second ECC blocks are coded independently for error correction (col. 14 lines 3-13, col. 10 lines 5-25); and

wherein the first ECC block and the second ECC block form a single physical data structure (col. 16 lines 34-65, col. 15 lines 50-55, col. 14 lines 3-13, col. 10 lines 5-25).

Takemura does not specifically teach the use of user data and control information within the error correction code.

Sako teaches user data and control information within the error correction code (col. 7 lines 10-15, col. 10 lines 12-15, col. 12 lines 53-65).

It would have been obvious to one skilled in the art at the time of the invention to combine the teachings of Takemura and Sako because Sako use of data and control information within the error code would improve Takemura's system by providing more user information during error correction.

5. As per claim 9, Sako teaches a optical disc wherein the logical data format comprises an error-correcting code having a long distance code (LDC) in one direction; and the user data is arranged in a same direction as the error-correcting code (col. fig. 8, col. 8 lines 27-31).
6. Claims 10-11 are rejected based on the same rejections for claims 8-9 above.
7. Claims 12-13 are rejected based on the same rejections for claims 8-9 above.

8. As per claim 14 Takemura teaches an a method of writing to an optical disc in a data format in which a logical data structure being disposed in a respective ECC block each respective ECC block being coded independently for error correction, each respective ECC block is grouped to form a single physical data structures (col. 14 lines 3-13, col. 10 lines 5-25, the first and second ECC blocks being coded independently for error correction the first ECC block and the second ECC block form a single physical data structure (col. 16 lines 34-65, col. 15 lines 50-55, col. 14 lines 3-13, col. 10 lines 5-25)).

Takemura does not specifically teach the use of user data and control information within the error correction code.

Sako teaches a method of combining control information from an application program with other control information including a drive ID and a disc ID, and converting the control information from the application program in an optical disc drive (col. 7 lines 10-15, col. 10 lines 12-15, col. 12 lines 53-65); and one of encrypting and scrambling the user data with the control information thus combined or converted (col. 9 lines 20-30).

9. Claim 15 is rejected based on the same rejection as claim 14 above with in addition to the following.

Sako teaches writing to the optical disc the information thus combined or converted as a block of control data (Fig 7, col. col. 9 lines 30-56).

10. Claim 16 is rejected based on the same rejection as claim 14 above with in addition to the following.

Sako teaches decrypting and descrambling intra-block control information corresponding to the control information in the data format in the first block while sending in a second format the intra-block control information corresponding to the control information in the data format to an application program (fig.5, col. 9 line 59 –col. 10 line 4).

11. Claim 17 is rejected based on the same rejection as claim 14 above with in addition to the following.

Sako teaches writing to the optical disc the information thus combined or converted as a block of control data (Fig 7, col. col. 9lines 30-56).

12. Claim 18 is rejected based on the same rejection as claim 8 above with in addition to the following.

Sako teaches writing the modulated data with the synchronization signal to the optical disc (fig.3 element 32 col. 10 lines 61-67, col. 11 lines 20-26).

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nilesh Shah whose telephone number is 703-305-8105. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, meng An can be reached on 703-305-9678. The fax phone

number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nilesh Shah

Examiner

Art Unit 2127

NS

June 8, 2004



MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100